

GETTING TO GREEN

THE CASE FOR
GREEN BUILDING IN
AFFORDABLE
HOUSING

HUD Secretary speaking before the House Committee on Financial Services

- **“The dramatic increase in energy costs has particularly burdened low- and moderate-income families... In the long run, as the President's Energy Policy recognizes, we need to become more efficient with our use of energy in housing.”**

Policy Drivers

- **Energy Policy Act of 2005**
- **Rising energy costs**
- **Older housing stock**
- **Dealing with uncertainty**
- **Public housing transition to Asset Management**

Energy Policy Act of 2005

- **Integrate utility management and capital planning**
- **Extend EPCs to 20 years**
- **Public Housing Agency shall purchase appliances that are Energy Star**
- **Use of 2003 IECC for rehabilitation/new construction (HOPE VI)**
- **Report to Congress on energy strategy, actions taken to monitor energy usage**

Winter Fuel Outlook 2007/2008

- **Average winter –season Oct 1 – Mar 31**
 - Prices/expenditures for space heating fuels
 - projected to be higher than winter 2006-2007
- **NOAA – Winter in lower 48 States forecast to be 4% colder compared with last winter**
 - 2% warmer than 30-year average(1971-2000)

Rising Energy Costs 2007/2008

- **Natural Gas** prices expected to rise 10%
- 58% of all households use natural gas
- In the Midwest, 79% use natural gas
- **Heating Oil** prices expected to rise 22%
- 7% of US household use heating oil
- In the Northeast, 32% use heating oil

Rising Energy Costs 2007/2008

- **Propane prices expected to rise 16%**
 - 5% of US households use propane
 - Cost in West to increase by 10%; in Northeast by 21%
- **Electricity prices expected to rise by 4%**
 - 30% of US households rely on electricity
 - Primary heating source for 30% of US
 - Households:
 - in West 30%; in South 52%;
 - 11% in Northeast and Midwest

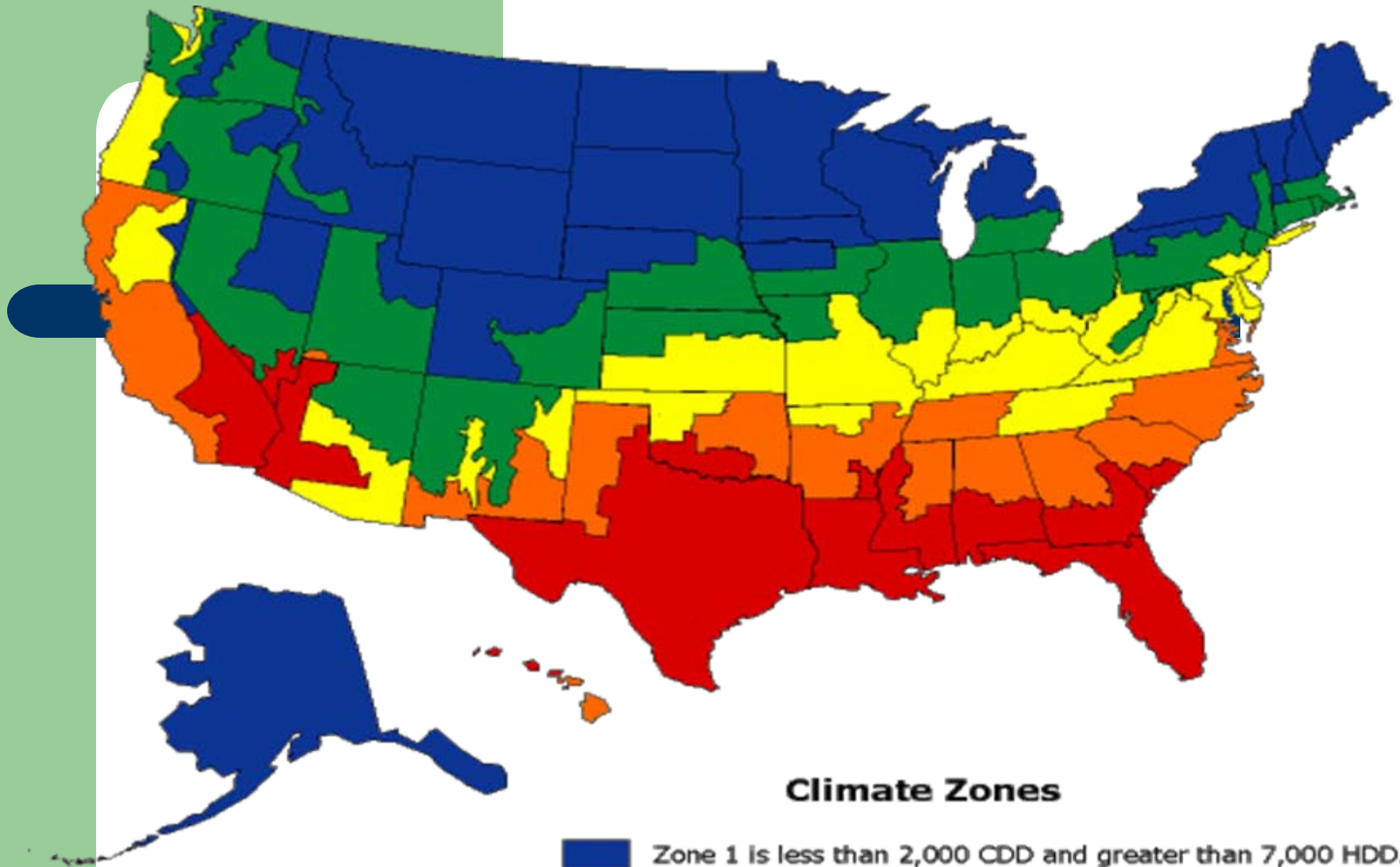
HUD Energy Costs

- Americans spend \$160 billion annually
- to light, heat, and cool their homes
 - Of \$160 billion, HUD spends \$4 billion annually, 10% of its budget (allowances and grants)
 - \$1.601 billion PHA –paid (23% of expenditures) + \$411 million in tenant paid
 - 2.012 billion (Total utility cost in PH)
 - \$139.65/unit/mo in 2008; 43% increase since 2004 (\$97.78/unit/mo)

Older Housing Stock

**_____ are
built before 1970**

- **Approximately 47% are located in climate zone 2 with 5,500 - 7,000 heating degree days, second coldest climate zone**



Climate Zones

- Zone 1 is less than 2,000 CDD and greater than 7,000 HDD.
- Zone 2 is less than 2,000 CDD and 5,500-7,000 HDD.
- Zone 3 is less than 2,000 CDD and 4,000-5,499 HDD.
- Zone 4 is less than 2,000 CDD and less than 4,000 HDD.
- Zone 5 is 2,000 CDD or more and less than 4,000 HDD.

June 12, 2008

2008 Montana Housing
Conference

HUD'S ENERGY ACTION PLAN



Promoting Energy Efficiency

and Conservation –

HUD's Energy Action Plan

Key Strategies

- Education, outreach and training
- Interagency cooperation
- Market-based incentives
- Public-private partnerships

The Action Plan identifies 21 actions:

1 – Strengthen interagency partnerships

- 1 Work with the Environmental Protection Agency (EPA) to distribute ENERGY STAR® information to HUD customers and clients.
- 2 Initiate HUD and Department of Energy (DOE) multifamily weatherization partnerships in at least five states.
- 3 Formalize interagency partnerships with DOE and EPA.

II – Provide information, training and technical assistance

- 4 Coordinate Department-wide training workshops and standardize information on energy-efficient healthy housing.
- 5 Sponsor energy efficiency training for assisted multifamily housing managers and maintenance staff.
- 6 Provide technical assistance to encourage energy efficiency when using HOME and CDBG funds.
- 7 Assist non-profit and faith-based organizations to develop, build and manage energy-efficient housing.

III – Strengthen rewards and incentives

- 8 Streamline procedures for energy performance contracting in public housing.
- 9 Feature Energy Efficient Mortgages as a priority loan product.
- 10 Simplify regulatory requirements for Energy Efficient Mortgages.
- 11 Award priority rating points for energy-efficient housing in HUD's competitive grant programs.

IV – Strengthen
energy
standards
and program
requirements

12 Require housing authorities to base equipment purchases on ENERGY STAR standards (unless demonstrated that it is not cost-effective).

13 Establish HOPE VI as a leader in cost-effective and energy-efficient new construction.

V – Strengthen
management
and monitoring

14 Assign Department-wide responsibility for coordinating and supporting HUD's energy programs.

15 Include energy efficiency performance measures in the Annual Performance Plan.

16 Improve tracking and monitoring of energy efficiency in public and assisted housing.

17 Improve tracking and evaluate performance of Energy Efficient Mortgages.

VI – Support policy
analysis and
technology
research

18 Conduct energy-related policy analysis and research.

19 Research, test and demonstrate innovative technologies in new construction and existing housing.

20 Promote combined heating and power (CHP) in public or assisted housing.

21 Develop integrated approaches to energy efficiency and environmental hazards in the home.

Energy Independence and Security Act of 2007

Public Law 110-140

- Sec. 481. Application of International Energy Conservation Code to Public and Assisted Housing
- Amends and updates section 109 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12709)

Energy Independence and Security Act of 2007

Public Law 110-140

- (1) IN GENERAL.—The Secretary of Housing and Urban Development and the Secretary of Agriculture shall, not later than September 30, 2006, jointly establish, by rule, energy efficiency standards for—
- (A) new construction of public and assisted housing and single family and multifamily residential housing (other than manufactured homes) subject to mortgages insured under the National Housing Act;

Energy Independence and Security Act of 2007

Public Law 110-140 (Cont.)

- (B) new construction of single family housing (other than manufactured homes) subject to mortgages insured, guaranteed, or made by the Secretary of Agriculture under title V of the Housing Act of 1949; and
- (C) rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v).

Energy Independence and Security Act of 2007

Public Law 110-140 (Cont.)

- (2) CONTENTS.—Such standards shall meet or exceed the requirements of the 2006 International Energy Conservation Code, or, in the case of multifamily high rises, the requirements of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers Standard 90.1–2004 (hereafter in this section referred to as “ASHRAE Standard 90.1–2004”), . . .

Public Law 110-140 (Cont.)

- . . .and shall be cost-effective with respect to construction and operating costs on a life-cycle cost basis. In developing such standards, the Secretaries shall consult with an advisory task force composed of homebuilders, national, State, and local housing agencies (including public housing agencies), energy agencies, building code organizations and agencies, energy efficiency organizations, utility organizations, low-income housing organizations, and other parties designated by the Secretaries. . .
- There is more.....but

H.R. 6078, the Green Resources for Energy Efficient Neighborhoods Act of 2008

The bill provides incentives to lenders and financial institutions to provide lower interest loans and other benefits to consumers, who build, buy or remodel their homes and businesses to improve their energy efficiency. This timely legislation reflects the input of a broad coalition of housing advocates, financial institutions, government leaders, developers, and the environmental community.

H.R. 6078, (cont.)

- “This legislation proves that it is easy to be green. This bill helps revitalize our economy by making energy efficiency practices more affordable, accessible and achievable by consumers, businesses and government entities,” said Rep. Ed Perlmutter.
- Hearing scheduled June 11, 2008 (Yesterday)

NEWS – RESOURCES (cont.)

- ACEEE (American Council for an Energy Efficient Economy)
www.aceee.org
The American Council for an Energy-Efficient Economy is a nonprofit organization dedicated to advancing energy efficiency as a means of promoting both economic prosperity and environmental protection.
- **THE "INVISIBLE" U.S. ENERGY EFFICIENCY BOOM:
ACEEE REPORT FINDS U.S. ENERGY CONSUMPTION CUT
IN HALF BY ONE MAJOR MEASURE SINCE 1970 ... BUT
MUCH OF THE UNTAPPED ENERGY EFFICIENCY
POTENTIAL COULD BE WASTED**

NEWS – RESOURCES (cont.)

HUD's *Homes and Communities* - ENERGY:

Saving Money and Energy in HUD-Assisted and HUD-Financed Housing:

<http://www.hud.gov/energy/> and ENERGY STAR® For New Homes:

http://www.energystar.gov/index.cfm?c=new_homes.hm_index

NEWS – RESOURCES (cont.)

2007 The Cost of Green Revisited
Category **Sustainability Research**
Published **2007**

Author **Lisa Fay Matthiessen / Peter Morris**

The 2006 study shows there is no significant difference in average costs for green buildings as compared to non-green buildings.

<http://www.davislangdon.com/USA/Research/ResearchFinder/2007-The-Cost-of-Green-Revisited/>

NEWS – RESOURCES (cont.)

HOME ENERGY AFFORDABILITY GAP

[/www.homeenergyaffordabilitygap.com/downloads/2007](http://www.homeenergyaffordabilitygap.com/downloads/2007) Released Apr08/States/Montana

NEWS – RESOURCES (cont.)

Enterprise: Bringing Home the Benefits of
Energy Efficiency to Low-Income Households
The Case For A National Commitment:
<http://www.practitionerresources.org/cache/documents/663/66381.pdf>

NEWS – RESOURCES (cont.)

NorthWestern Energy – Montana Green Power:

<http://www.montanagreenpower.com/>

NEWS – RESOURCES (cont.)

- National Public Radio - **Home Prices Drop Most in Areas with Long Commute:**

<http://www.npr.org/templates/story/story.php?storyId=89803663&url=http://www.kufm.org/&f=module-nprnews>

NEWS – RESOURCES (cont.)

PATH Offers Guide to Green Building

<http://pathnet.org/index.asp>

<http://pathnet.org/sp.asp?id=15221>

NEWS – RESOURCES (cont.)

- **Visionary Solutions for What's Working in Green Building:**

<http://www.whatsworking.com/press.html>

- **USBC –U.S.GREEN BUILDING COUNCIL Publications:**

http://www.usgbc.org/DisplayPage.aspx?CMSPageID=77#usgbc_publications